Oral health care and pregnancy

What is the Public Health Issue?

Oral health is integral to general health.[1] Recent studies have suggested an association between maternal gum disease and negative pregnancy outcomes. Much attention has been focused on preterm birth - the second leading cause of neonatal mortality. As many as 25% of preterm deliveries have no known cause. [2,3]

Other data indicate a link between maternal oral health and the development of early childhood caries (ECC), a particularly damaging form of tooth decay affecting up to 1 in 10 young children.[4] Since tooth decay is an infectious disease, a reduction in maternal cavity-causing bacteria may diminish transmission of these bacteria between mother and child.[5]

What is the situation in Maine?

Data from 2000 on Maine mothers reveal disparities in receipt of oral health care during pregnancy. For example, when a mother reported a dental problem during pregnancy, she was less likely to seek care if she was younger (20-24 years old), if she was enrolled in the WIC program, or if she had an income less than $16,000. However, women with an income of less than $16,000 were twice as likely to be in need of seeing a dentist as those with an income of $40,000 or more.[6]

With respect to negative birth outcomes, Maine is falling short of the Healthy People 2010 Objectives. In 2000, 6% of births in Maine were low birth weight (<2,500g) babies, and 9.5% were preterm (before 37 weeks). Furthermore, between 1991 and 2000, the proportion of babies born prior to 37 weeks has risen by 30%, and the proportion of babies born who weigh less than 2500g has risen by 11 percent.[7]

Related Healthy People 2010 Objectives: [8]

- ✓ *Reduce percentage of babies born weighing <2,500g to 5%.*
- ✓ *Reduce percentage of babies born prior to 37th week of pregnancy to 7.6%.*
- ✓ *Reduce tooth decay experience in 2-4 year olds to 11%.*

Healthy Maine 2010 objective: [9]

- ✓ *Reduce the proportion of children with tooth decay in their primary teeth to 25%.*

Finally, a preschool oral health survey conducted in Maine's Washington County showed that 35% of children aged 1-4 years old had experienced tooth decay, and that 13% had evidence of early childhood caries, a more severe form of decay.[9] It is important to note that while this data is only from one county, it still indicates the presence of severe tooth decay in Maine's youngest children.

What is Maine doing?

Since 1996, and with further changes in the Dental Practice Act effective in 2001, registered dental hygienists in Maine have been able to provide preventive dental services in many public health settings. These changes have helped many persons who otherwise would have great difficulty in obtaining dental care, including mothers whose families are served by programs such as WIC and Head Start.

Likewise, Maine's Oral Health Program began planning the implementation of an Early Childhood Caries Prevention and Intervention Program in 2002. This program aims to educate and train non-dental health providers, particularly pediatric and family practice providers, to identify at-risk children at an early age and assure timely referral and intervention. The goal of the program is to decrease the incidence of oral disease in Maine's young children.

Strategies for Maine's future:

- ✓ *Encourage prenatal providers to consider the oral health of their patients and refer as necessary.*
- ✓ *Educate pregnant women about the importance of oral health for themselves and their children.*
- ✓ *Use dental hygienists, in their public health role, to promote oral health among mothers and their young children.*
- ✓ *Support proven community based strategies to prevent tooth decay (fluoridation and sealants).*

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